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09/385,802	08/30/1999	KEVIN REMINGTON JOSEPH BARTHOLOMEN DONOVAN	4031/1	9671

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MCANDREWS HELD & MALLOY, LTD
500 WEST MADISON STREET
SUITE 3400
CHICAGO, IL 60661

EXAMINER	
CHANKONG, DOHM	
ART UNIT	**PAPER NUMBER**
2152	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/385,802	BARTHOLOMEN DONOVAN, KEVIN REMINGTON JOS	
	Examiner	Art Unit	
	Dohm Chankong	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 October 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *16-20,22,103 and 105-151* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *16-20,22,103 and 105-151* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/12/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1> This action is in response to Applicant's amendments and remarks, filed 10.12.2006. Claims 16, 105-108, 112-114, 118 and 125 are amended. Claims 128-151 are added. Claims 16-20, 22, 103 and 105-151 are presented for further examination.

2> This is a final rejection.

Oath/Declaration

3> The declarations filed under 35 U.S.C §1.132 have been received and are noted. The background information and statements offered by Professors Hollaar and Rubin have been considered.

Response to Arguments

I. APPLICANT'S CLAIMS ARE NOW REJECTED UNDER 35 U.S.C §112, FIRST PARAGRAPH.

As understood by the Office, the main focus of Hollaar and Rubin's statements are to evince the novelty of incorporating encryption technology into an instant messaging system that spans multiple realms, or service providers. As asserted by Rubin, "encryption would not have been common skill for an instant messaging programmer to have had in 1999." In view of Professor Hollaar's declaration (hereinafter, "Hollaar") and Professor Rubin's declaration (hereinafter "Rubin"), the Office submits that Applicant's claims and specification are entirely deficient, suffering from several §112 issues for having claims that

fail to include essential subject matter and failing to comply with the enablement requirement.

A. Claims 16-20, 22, 103 and 105-151 are rejected for failing to include essential subject matter.

Claims 16-20, 22, 103 and 105-151 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The instant messaging server, an instant messaging database, and authorization database and a profile database are all critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See In re Mayhew, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

Hollaar discloses that "the present invention uses a single IM manager which retrieves information about the particular protocol needed for the first user to communicate with the second user from a database accessible to the first user". Applicant's present invention would not be possible without the various servers and databases as illustrated in Figure 1 and described in detail in the specification and therefore should be included in the claims. Therefore, the use of the IM server and the various databases are necessary for the full functioning of Applicant's invention, to enable instant messaging between users of different realms and to enable encryption of messages, as between the devices. However, claim 1 does not disclose these essential elements.

B. Claims 16-20, 22, 103 and 105-151 are rejected for failing to comply with the enablement requirement because undue experimentation is required.

Claims 16-20, 22, 103 and 105-151 are rejected for failing to comply with the enablement requirement. The test of enablement is not whether any experimentation is necessary, but

whether, if experimentation is necessary, it is undue. In re Angstadt, 537 F.2d 498, 504 (CCPA 1976). The specification must teach those skilled in the art how to make and use the full scope of the claimed invention without undue experimentation. In re Wright, 999 F.2d 1557, 1561 (Fed.Cir. 1993). Undue experimentation factors include, but are not limited to the nature of the invention, the state of the prior art, the level of one of ordinary skill, the level of predictability in the art and the amount of direction provided by the inventor. In re Wands, 858 F.2d 731, 737 (Fed. Cir. 1988). The factors in the instant application weigh towards a conclusion that undue experimentation would be necessary.

i. In this case, undue experimentation factors suggest that undue experimentation would be necessary to make Applicant's invention.

Additionally, if little is known in the prior art about the nature of the invention and the art is unpredictable, the specification would need more detail as to how to make and use the invention in order to be enabling. MPEP §2164.03.

Here, Applicant's specification fails the test of enablement because there would be undue experimentation necessary to implement encryption over multiple realms. Rubin's statements are especially helpful in considering the nature of the invention, the state of the prior art and the level of one of ordinary skill in the art at the time of Applicant's invention. Rubin submits that at the time of Applicant's invention one skilled in the art would have been "discouraged" from multi-realm instant messaging and encryption. Indeed, Rubin explains that "[a]dding encryption to multi-realm instant messaging would have added *so many complications*...that messaging providers would have had good reason to avoid using encryption in their instant messaging services" (italics provided). Most tellingly, Rubin

asserts that "encryption would not have been a common skill for an instant messaging programmer to have had."

The import of Rubin's statements are clear - encrypting multi-realm instant messages would have proven difficult to one skilled in the art at the time of filing Applicant's invention since little was known by those skilled in the art and implementation of encryption across multiple service providers would have been problematic.

Therefore, there should be a substantial amount of guidance provided in Applicant's specification as to how to overcome the "complications" that would have "discouraged" messaging providers from implementing encryption within its systems. And since encryption skills were lacking at the time of filing, there also should be substantial guidance in order to instruct one skilled in the art (an instant messaging programmer) as to how to incorporate encryption within a multi-realm instant messaging system.

But beyond a mere throwaway statement that "if necessary, this preliminary exchange [between users] may include an encryption key to allow the communications between [users] to be encrypted using any standard security protocol", there is nothing in Applicant's specification that would have provided guidance as to how to make or use the invention. Applicant's specification would not have provided one skilled in the art the information necessary to make and use Applicant's invention.

ii. Rubin's statements also imply that the particular invention would not have been possible at the time of filing.

If individuals of skill in the art state that a particular invention is not possible years after the filing date, that would be evidence that the disclosed invention was not possible at the time of filing and should be considered. MPEP §2164.05(a). Rubin states that while

"[e]xport requirements were relaxed in 2000, the user of encrypted instant messaging was not widely adopted even a half decade after Donovan's priority date" and "the exportation of encryption from the United States was approved on a *case-by-case* basis" (italics provided). The thrust of these statements suggests that Applicants invention would not have been possible to be implemented at the time of filing.

More importantly, these statements further imply that Applicant's disclosure should provide substantial guidance as to how to implement and use the invention since the state of the art was so antithetical to Applicant's invention.

II. WITH RESPECT TO CLAIMS 16-20, 22, 103 AND 105-107, APPLICANT IS ARGUING LIMITATIONS THAT HAVE NOT BEEN GIVEN PATENTABLE WEIGHT BECAUSE THE RECITATION OCCURS IN THE PREAMBLE.

In response to applicant's arguments, with respect to claims 16-20, 22, 103 and 105-107, the recitation of conducting an instant messaging session between two users, one user in a first realm and another user in a second realm has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See In re Hirao, 535 F.2d 67, (CCPA 1976) and Kropa v. Robie, 187 F.2d 150, 152, (CCPA 1951).

Here, the body of the claim does not depend on the preamble for completeness and the limitations present in the body of the claim are capable of standing alone. That is, the ability to communicate between multiple "realms" is a major portion of the alleged patentability of the invention and yet this functionality is located only in the preamble of the

claim. Looking merely at the body of the claim, one of ordinary skill in the art would see only an invention directed towards instant messaging between users. Applicant should amend these claims to incorporate limitations of the preamble so as to properly give these limitations their proper patentable weight.

III. HOLLAAR AND RUBIN ARE ARGUING LIMITATIONS THAT ARE NOT PRESENT IN THE CLAIMS.

Professors Hollaar and Rubin's statements as to the background of the art and their reasoned analysis of the relied upon references are appreciated and have been taken into consideration. However, their arguments to distinguish the claimed invention over the prior art rely upon limitations not present in Applicant's claims.

For example, Hollaar argues that Gudjonsson is deficient with respect to encryption because it does not teach "use of encryption between two users" and instead teaches encryption between servers within a cluster or in different clusters. In the Office's view, this argument implies the peer-to-peer connection as illustrated in Applicant's Figure 1.

However, the claims merely cite encrypting between devices that enable a user to access the Internet. Specifically, claim 1 recites "encrypting, as between the devices, an instant message." Servers can be interpreted as reading on this limitation as servers are necessary for enabling users to access the Internet.

Similarly, Rubin argues that "Gudjonsson...does not disclose an instant messaging client that would communicate privately with one or more clients through the use of encryption" and "does not address the use of encryption to keep communication between two or more parties private; kept secret from both other clients and from the messaging server." Again, like Hollar's statements, whether the characterization of Gudjonsson is accurate or

not, these limitations are also not present in Applicant's claims. Nothing in the claims remotely suggests that messages must be "kept secret" from the messaging server.

IV. GUDJONSSON IS ENTITLED TO THE PRIORITY DATE OF ITS PROVISIONAL APPLICATION BECAUSE THE SUBJECT MATTER RELIED UPON TO MAKE THE REJECTION IS FULLY SUPPORTED UNDER 35 U.S.C §112, FIRST PARAGRAPH.

Applicant argues that Gudjonsson does not constitute prior art. For instance, Applicant argues that since the "Abstract" of the later filed application is not contained in Gudjonsson's provisional application (60|133,401), the priority date is that of the later filed application and not the provisional. However, the test for whether or not a reference is entitled to an earlier priority date of the provisional application is whether or not the *subject matter* is fully supported by the provisional. MPEP §706.02(V).

Here, Gudjonsson's provisional application fully supports the relied upon subject matter. Gudjonsson's abstract discusses a system for brokering communications between users in networks having different protocols. The Abstract also discusses other features such as having multiple different clusters, registering a user in a specific cluster and allowing communications between different clusters. Other subject relied upon includes encrypting communications between clients.

The provisional application discloses the feature of encrypting communication streams both within a cluster of clients and between different clusters. Gudjonsson's provisional application, pg 4, line 11 to pg. 5, line 5. The provisional discusses at length the cluster feature and the desire to enable communications between different devices that are in the different clusters. Gudjonsson, pg. 4, line 1 to pg. 7, line 20. Because the provisional

application fully supports the subject matter relied upon to make the rejection, Gudjonsson is entitled to the earlier filing date of its provisional application.

V. WITH RESPECT TO CLAIMS 112 AND 113, APPLICANT'S AMENDMENT AND HOLLAAR'S STATEMENTS HAVE BEEN CONSIDERED BUT ARE NOT PERSUASIVE.

Hollaar argues that Applicant's claims 112 and 113 are distinguished because Applicant's invention uses "a single IM manager" as opposed to the "separate protocol service modules" as disclosed in Auerbach. Hollaar's analysis focuses on the fact that there are a plurality of protocol service modules while the instant invention also claims a single database. Whether or not Hollaar's analysis is correct, amended claim 112 merely recites retrieving an instant messaging protocol from a database that is accessible to the first user. Ignoring the fact that Hollaar's statement incorrectly presumes that a "single IM manager" is present in Applicant's claims, there is nothing in the claim language that precludes more than one database in the system. As long as the prior art discloses retrieving a messaging protocol from a database that is accessible to the first user and using that protocol to connect to another user, then the prior art reads on the claim.

In any case, Auerbach's protocol modules are part of a single device, the conversion platform. The Office interprets Auerbach's conversion platform as Applicant's database. Each of the protocol modules are retrieved when a user attempts to communicate with another user that uses a different communication protocol. The conversion platform stores the protocols (within the protocol modules) associated with each user and enables establishment of connection between users based on the particular messaging protocol. Similar remarks apply to claim 113.

VI. THE CLAIM REJECTIONS UNDER AUERBACH AND KIM IN VIEW OF GUDJONSSON ARE MAINTAINED.

As mentioned in section III of this response, Hollaar and Rubin's statements are appreciated but they discuss the prior art and how they relate to Applicant's invention as discussed in the specification. While informative, that is the wrong analytical path to follow; the prior art references should be analyzed with respect to Applicant's claims. See MPEP §2111. It is improper to import claim specifications from the specification. MPEP §2111.01(II).

Here, taking claim 1 as an exemplary example, the claim limitations are directed towards: (1) determining a current IP address of the second user; (2) establishing a connection between said first and second users using said current IP address and said protocol characteristic as part of an instant messaging session; and (3) encrypting, as between the devices, an instant message during the instant messaging session.

With respect to (1), Auerbach discloses determining a current IP address of the second user [column 4 «lines 3-25» | column 9 «lines 50-57»]. With respect to (2), Auerbach discloses establishing a connection between said first and second users using said current IP address and said protocol characteristic as part of an instant messaging session [column 9 «lines 45-57» | column 11 «lines 8-45»].

Auerbach does not expressly disclose encrypting, as between the devices, an instant message during the instant messaging session. However, Gudjonsson cures this deficiency. Gudjonsson discloses "[a] connection is an end-to-end connection between two computers which can be authenticated and encrypted and which can provide data integrity" [column 16 «lines 58-60»]. As seen in figure 1, a user 7 in one cluster 9, may communicate with a user 7 of another cluster 9. Specifically, "[c]onnections can also be made between services and/or

users 7 in different clusters 1, as illustrated in FIG. 1" [column 8 «lines 29-34»]. Gudjonsson discloses that communications between different servers in different clusters can be encrypted. Thus, Gudjonsson discloses encrypting, as between the devices, an instant message during the instant messaging session, where Gudjonsson's servers are analogous to "the devices."

From Rubin and Hollaar's statements, it seems the limitation of "as between the devices" is supposed to refer to the peer to peer connection as illustrated in Applicant's Figure 1. If this is the case, then the claims should be amended to clearly and particularly describe this feature.

VII. THE CLAIM REJECTIONS UNDER ARAVAMUDAN, IN VIEW OF GUDJONSSON ARE MAINTAINED.

For the same reasons set forth above, Gudjonsson discloses the feature of encrypting, as between the devices, an instant message during the instant messaging session. The Office submits that the motivation to combine the Gudjonsson's invention with Aravamudan is proper based on Applicant's claims as they are currently written.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4> Claims 16-20, 22, 103 and 105-151 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The instant messaging server, an instant

messaging database, and authorization database and a profile database are all critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). See response to arguments above.

5> Claims 16-20, 22, 103 and 105-151 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. See response to arguments above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6> Only those claims that have been amended or added by Applicant are formally addressed in this action. The text of those sections of Title 35, U.S. Code not included in this action can be found in prior Office actions.

7> Claims 112 and 113 are rejected under 35 U.S.C §103(a) as being anticipated by Auerbach et al, U.S Patent No. 6.549.937 ["Auerbach"].

8> As to claim 112, Auerbach discloses a method of conducting an instant messaging session between a first user and a second user over the Internet, the method comprising the steps of:

retrieving an instant messaging protocol suitable for communications with said second user from a database accessible to the first user [Figure 2 «item 112» | column 5 «lines 27-37» | column 7 «lines 10-28» where : Auerbach's conversion platform 112 is analogous to Applicant's claimed database]; and

establishing a connection from said first user to said second user using the instant messaging protocol as part of an instant messaging session [column 7 «line 65» to column 8 «line 40»].

9> As to claim 113, Auerbach discloses a method of conducting an instant messaging session between a first user and a second user over the Internet, the method comprising the steps of:

retrieving one of a plurality of instant messaging protocols, the one instant messaging protocol being suitable for communications with said second user from a database accessible to the first user [Figure 2 «item 112» | column 5 «lines 27-37» | column 7 «lines 10-28» where : Auerbach's conversion platform 112 is analogous to Applicant's claimed database];

displaying an instant message from said first user to said second user using the instant messaging protocol [column 7 «line 65» to column 8 «line 40»].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10> Only those claims that have been amended or added by Applicant are formally addressed in this action. The text of those sections of Title 35, U.S. Code not included in this action can be found in prior Office actions.

11> Claims 16-20, 22, 103, 105-111, 118-121 and 125-127 are rejected under 35 U.S.C § 103(a) as being unpatentable over Aravamudan et al, U.S Patent No. 6.301.609 ["Aravamudan"], in view of Gudjonsson et al, U.S Patent No. 6.564.261 ["Gudjonsson"].

12> As to claim 16, Aravamudan discloses a method of conducting an instant messaging session between a first user and a second user over the Internet, said first and second users being associated with a first realm and second realm respectively [Figure 3 «items 184 and 192»], each said realm being accessible via the Internet using a protocol characteristic to said realm [column 5 «lines 32-51» | column 7 «lines 3-20» where : if a PSTN network, for

instance, a PSTN exchange number is used], each said user getting access to the Internet via one of a respective first and second device [Figure 2], at least one of said first and second devices having a storage media storing the protocol characteristic of the other realm [column 7 «lines 3-20» | column 12 «lines 9-30»], the method comprising the steps of:

determining a current IP address of the second user [column 4 «lines 3-25» | column 9 «lines 50-57»];

establishing a connection between said first and second users using said current IP address and said protocol characteristic as part of an instant messaging session [column 9 «lines 45-57» | column 11 «lines 8-45»].

Aravamudan does not expressly disclose encrypting instant messages.

13› In a related field of invention Gudjonsson is directed towards establishing communication sessions between users over a variety of networks. Gudjonsson discloses encrypting, as between the devices, an instant message during the instant message session [abstract | column 2 «lines 16-23» | column 11 «lines 38-43» where : Gudjonsson's servers in different clusters are analogous to Applicant's claimed "devices"; see also response above]. It would have been obvious to one of ordinary skill in the art to incorporate encryption services into Aravamudan's communication system for the desirable function of having secured transmissions of network messages between users.

14> As to claim 108, Aravamudan discloses a method of conducting an instant messaging session, the method comprising:

establishing an instant messaging session over an Internet protocol network between a first user device and a second user device [column 3 «lines 26-52»], each said user device corresponding to a user name [column 6 «lines 50-63.], each said user name corresponding to a different realm [column 6 «lines 27-29 and 50-67» | column 7 «lines 9-20»], each said user device having an Internet protocol address in the realm corresponding to the user name [column 4 «lines 20-25» | column 9 «lines 49-57»].

15> Aravamudan does not expressly disclose encrypting instant messages.

In a related field of invention Gudjonsson is directed towards establishing communication sessions between users over a variety of networks. Gudjonsson discloses encrypting, as between devices, an instant message during the instant message session [abstract | column 2 «lines 16-23» | column 11 «lines 38-43» where : Gudjonsson's servers are analogous to Applicant's claimed devices]. It would have been obvious to one of ordinary skill in the art to incorporate encryption services into Aravamudan's communication system for the desirable function of having secured transmissions of network messages between users.

16> As to claim 118, as it does not teach or further define over the previously claimed limitations they are similarly rejected for at least the same reasons set forth above for claims 16 and 108.

17› As to claim 125, Aravamudan discloses said first realm has a protocol and said second realm has a protocol, said protocols being different [column 7 «lines 3-20» : [PSTN vs. packet have different protocols].

18› Claims 114-117 and 122-124 are rejected as being unpatentable over Aravamudan, in view of Shah et al, U.S Patent No. 6.606.647 ["Shah"].

19› As to claim 114, Aravamudan discloses an instant message receiving system, said system including:

a first user device connected to an Internet Protocol Network and associated with a first Internet Protocol address, a first user name, and a first realm [column 3 «line 26» to column 4 «line 25»]; and

a second user device connected to said Internet Protocol Network and associated with a second Internet Protocol address, a second user name, and a second realm [column 3 «line 26» to column 4 «line 25» | column 7 «lines 3-20»];

Aravamudan does not expressly disclose key-encrypted instant messages.

20› Shah is directed towards routing messages to achieve unified communications. Shah discloses sending an receiving key-encrypted instant messages between a first user device and a second user device [abstract | column 5 «lines 14-21» | column 6 «lines 15-20» | column 7 «lines 37-42» where : Shah discloses message encryption and sending an encryption key of

the receiving device to the sending device. These two features strongly imply that the message is encrypted using the encryption key].

It would have been obvious to one of ordinary skill in the art to modify Aravamudan to incorporate Shah's message encryption key functionality. One would have been motivated to provide such a modification to improve Aravamudan's instant messaging system by providing message encryption.

21› Claims 16, 22, 105-108, 118, 122, 125 and 149are rejected under 35 U.S.C § 103(a) as being unpatentable over Auerbach in view of Kim, U.S Patent No. 6.490.274 ["Kim"], in further view of Gudjonsson.

22› As to claim 16, Auerbach discloses a method of conducting an instant messaging session between a first user and a second user over the Internet, said first and second being associated with a first realm and a second realm respectively [column 2 «lines 9-15» : different users, different service providers], each realm being accessible via the Internet using a protocol characteristic to the realm (col. 2, lines 19-28), each said user getting access to the Internet via one of a respective first and second device (fig. 3, client 102), at least one of said first and second devices having a storage media storing the protocol characteristic of the other realm (see fig. 3, protocol services 130 and 132) the method comprising the steps of:

establishing a connection between said first and second users [column 7 «line 65» to column 8 «line 27»].

While Auerbach discloses the user logging on to the primary service provider using

established logon procedures, and Auerbach does not specifically disclose the steps of determining a current IP address of the second user, and establishing a connection between the first and second users using the current IP address and the protocol characteristic. As discussed previously, the use of IP addresses to connect network users is implicit in Auerbach. Auerbach clearly discloses establishing network sessions between the users through his conversion platform; the platform would necessarily need to know the IP addresses of each user to do so. Further, Auerbach discloses establishing sessions based on the email addresses of users [column 1 «lines 46-61»]. It is well known in the art that email addresses are inherently tied to IP addresses.

Auerbach does not expressly disclose encrypting instant messages.

23› In a related field of invention Gudjonsson is directed towards establishing communication sessions between users over a variety of networks. Gudjonsson discloses encrypting an instant message, as between devices, during the instant message session [abstract | column 2 «lines 16-23» | column 11 «lines 38-43» where: Gudjonsson's servers are interpreted as Applicant's "devices"; see also response to Applicant's remarks above]. It would have been obvious to one of ordinary skill in the art to incorporate encryption services into Auerbach's communication system for the desirable function of having secured transmissions of network messages between users.

24› Furthermore, the step of searching for IP addresses and utilizing said IP addresses are well known in the art as evidenced by Kim. In similar art, Kim discloses a peer-to-peer

telephony system for supplying service using a cable network that discloses when a first or second cable phone initiates a call, the network segment units each have a head end unit that read IP addresses stored in the directory unit based on a received telephone number of a second cable phone and determines a session using an internet protocol from the read IP addresses to set a call path with the first cable phone (see Kim, abstract and col. 4, lines 56-65). It would have been obvious to supplement the system disclosed by Auerbach to include the IP address database taught by Kim in order to allow the user to connect to and engage particularly in instant messaging sessions regardless of their different protocol or service providers used. As Auerbach suggests searching for the email addresses of users to establish communication sessions, utilization of Kim's IP address database would have been an obvious modification to the system disclosed by Auerbach.

25› As to claims 105-107, Auerbach discloses a handheld and palmtop computer [column 3 «lines 32-37»] and a WebTV device [column 3 «lines 32-37» : "consumer electronics"].

26› As to claim 108, Auerbach discloses a method of conducting an instant messaging session, the method comprising:

establishing an instant messaging session over an Internet protocol network between a first user device and a second user device [column 1 «lines 46-61»], each said user device corresponding to a user name [Figures 4A, 4B.], each said user name corresponding to a different realm [column 2 «lines 26-32»] , each said realm having a protocol characteristic to the realm [Figure 4B | column 2 «lines 26-32»].

Auerbach does not expressly disclose each said user device having an Internet protocol address in the realm corresponding to the user name. As discussed previously, the use of IP addresses to connect network users is implicit in Auerbach. Auerbach clearly discloses establishing network sessions between the users through his conversion platform; the platform would necessarily need to know the IP addresses of each user to do so. Further, Auerbach discloses establishing sessions based on the email addresses of users [column 1 «lines 46-61»]. It is well known in the art that email addresses are inherently tied to IP addresses.

Auerbach does not expressly disclose encrypting instant messages but see rejection of claim 16 above.

27› As to claims 118, as it does not teach or further define over the previously claimed limitations it is similarly rejected for at least the same reasons set forth above for claims 108 and 112.

28› As to claim 149, Auerbach discloses said realms comprise Internet service providers [abstract].

29› Claims 114-117 and 125 are rejected as being unpatentable over Auerbach and Kim, in view of Shah.

30› As to claim 114, Auerbach disclose an instant message receiving system, said system including:

a first user device connected to an Internet Protocol Network and associated with a first Internet Protocol address, a first user name, and a first realm [Auerbach, claim 1 & Kim, abstract]; and

a second user device connected to said Internet Protocol Network and associated with a second Internet Protocol address, a second user name, and a second realm [Auerbach, claim 1 & Kim, abstract];

Auerbach does not expressly disclose key-encrypted instant messages.

31› Shah is directed towards routing messages to achieve unified communications. Shah discloses sending an receiving key-encrypted instant messages between a first user device and a second user device [abstract | column 5 «lines 14-21» | column 6 «lines 15-20» | column 7 «lines 37-42» where : Shah discloses message encryption and sending an encryption key of the receiving device to the sending device. These two features strongly imply that the message is encrypted using the encryption key].

It would have been obvious to one of ordinary skill in the art to modify Auerbach to incorporate Shah's message encryption key functionality. One would have been motivated to provide such a modification to improve Auerbach's instant messaging system by providing message encryption.

32> As to claims 115-117, Auerbach discloses a handheld and palmtop computer [column 3 «lines 32-37»] and a WebTV device [column 3 «lines 32-37» : "consumer electronics"].

33> As to claim 125, Auerbach discloses said first realm has a protocol and said second realm has a protocol, said protocols being different [claim 1].

34> Claims 17-20, 103, 123, 124, 126 and 127 are rejected under 35 U.S.C. 103(a) as being unpatentable over Auerbach, Gudjonsson and Kim, in view of Appelman, U.S. Patent No. 6.750.881.

35> Claims 128-130, 132-134, 136-146, 150 and 151 are rejected under 35 U.S.C §103(a) as being unpatentable over Auerbach, in view of Shah.

36> As to claims 128 and 129, Auerbach discloses a system for instant messaging, the system including:

a first Internet service provider [abstract : sender and recipient each having different service providers];

a second Internet service provider [abstract : recipient's service provider;

a user name associated with the first Internet service provider [column 5 «lines 49-62»]; and

a second user name associated with the second Internet service provider [column 5 «lines 49-62»];

wherein each said user name corresponds to a respective device enabled to conduct an instant messaging session over the Internet [column 4 «lines 20-33» | column 5 «lines 49-62»].

Auerbach does not expressly disclose that said instant messaging session is encrypted as between the devices or that the devices are enabled by a prior communication of an encryption key.

37› Shah is directed towards routing messages to achieve unified communications. Shah discloses sending an receiving key-encrypted instant messages between a first user device and a second user device, the encryption key being sent in a prior communication [abstract | column 5 «lines 14-21» | column 6 «lines 15-20» | column 7 «lines 37-42» where : Shah discloses message encryption and sending an encryption key of the receiving device to the sending device. These two features strongly imply that the message is encrypted using the encryption key].

It would have been obvious to one of ordinary skill in the art to modify Auerbach to incorporate Shah's message encryption key functionality. One would have been motivated to provide such a modification to improve Auerbach's instant messaging system by providing message encryption.

38› As to claims 130 and 134, Auerbach discloses the instant messaging session facilitated by forming a relay connection [column 4 «lines 34-50»].

39› As to claims 132, 133, 136, 137, Auerbach discloses a portal instant messaging provider and a general instant messaging provider [column 5 «lines 11-37»].

40› As to claims 138-143 Auerbach discloses handheld and palmtop computers [column 3 «lines 32-37»] and a WebTV device [column 3 «lines 32-37» : "consumer electronics"].

41› As to claim 144, Auerbach discloses the system further including:

a third Internet service provider [column 5 «lines 16-20»]; and

a third user device associated with a user name at the third Internet service provider, wherein the third user device participates in the instant messaging session [column 5 «lines 11-62»].

Auerbach does not expressly disclose that said instant messaging session is encrypted as between the devices but see rejection of claim 128 above.

42› As to claim 145, Auerbach discloses the first device provides a friends list including the Internet service provider of the second user and a user name of the second user [column 6 «lines 14-42»].

43› As to claim 146, Auerbach discloses retrieving an instant messaging protocol suitable for communications with said second user from a database accessible to the first user [Figure 2 «item 112» | column 5 «lines 27-37» | column 7 «lines 10-28» where : Auerbach's conversion platform 112 is analogous to Applicant's claimed database].

44> As to claims 150 and 151, see rejection of claims 128 above.

45> Claims 131 and 135 are rejected under 35 U.S.C §103(a) as being unpatentable over Auerbach and Shah in view of DeSimone et al, U.S Patent No. 6.212.548 ["DeSimone"].

46> As to claims 131 and 135, Auerbach does not teach peer-to-peer connections but does teach that the invention may be practiced in "distributed computing environments." DeSimone discloses establishing peer-to-peer connections for instant messaging [Figure 2B | Figure 3 | column 4 «line 57» to column 5 «line 5»]. It would have been obvious to incorporate peer-to-peer methodology into Auerbach's instant messaging system as taught by DeSimone. One would have been motivated to provide such a combination as peer-to-peer messaging reduces burden on servers [see DeSimone, abstract].

47> Claims 147 and 148 are rejected under 35 U.S.C §103(a) as being unpatentable over Auerbach and Shah, in view of Avaramudan.

48> As to claim s147 and 148, Auerbach does not expressly disclose a service provider providing Internet telephone service.

49> Aravamudan discloses an internet service provider providing Internet telephone service and establishing a connection with an Internet service provider that provides Internet

telephone service [column 3 «lines 26-66» : "Internet Protocol (IP) telephony" | column 4 «lines 6-25»]. It would have been obvious to one of ordinary skill in the art to incorporate IP telephony devices and service providers into Auerbach's unified messaging system as IP telephony and telephony service providers were well known at the time of Auerbach's invention [see Aravamudan, column 1 «lines 37-39»]. One would have been motivated to provide such a combination so as to increase the functionality of Auerbach's system.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is 571.272.3942. The examiner can normally be reached on Tuesday-Friday [7:30 AM to 4:30 PM].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571.272.3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DC

BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER